## CLAIMS

1. A method for measuring the wear of a disk of composite ceramic material of a disk brake comprising the following operations:

- measuring the temperature (T) of the disk at a predetermined frequency (f),
- at every temperature measurement, calculating a wear increment ($\Delta i$) as a function of the measured temperature (T),
- summing the calculated wear increments ($\Delta i$),
- comparing the sum of the wear increments with the predetermined limiting wear index ($i_{lim}$) and
- signalling the eventual overstepping of the limiting wear index ($i_{lim}$).

2. A method in accordance with Claim 1, wherein the operation of calculating a wear increment ($\Delta i$) comprises the following steps:

- comparing the measured temperature (T) with a predetermined reference temperature ($T_r$) and
- calculating the wear increment ($\Delta i$) by using a first and a second predetermined function of the temperature when the comparison shows that the measured temperature (T), respectively, does and does not exceed the predetermined reference temperature ($T_r$).

3. A method in accordance with Claim 2, wherein both the first and the second predetermined function are exponential functions of the temperature.

4. A method in accordance with Claim 3, wherein the first and the second predetermined function are of the type:

$$\Delta i = \alpha * 1/f * \exp(\beta * T/T_0)$$

Where $\Delta i$ is the wear increment, T is the measured temperature, $T_0$ is a predetermined temperature constant, $\alpha$ is a first predetermined constant coefficient, $\beta$ is a second predetermined constant coefficient, and f is the sampling frequency.

5. A method in accordance with Claim 4, wherein the predetermined frequency (f) is a frequency chosen within the range comprised between 5 and 50 Hz, the predetermined reference temperature ($T_r$) is a temperature chosen within the range comprised between 350°C and 550°C, the predetermined temperature constant ($T_0$) is a temperature chosen within the range comprised between 350°C and 550°C and in which the constant coefficient $\alpha$ of the first function is comprised between 0 and 0.1 and the constant coefficient $\beta$ of the first function is comprised between 0 and 4, while in the second function the constant coefficient $\alpha$ is comprised

between 0 and 0.01 and the constant coefficient $\beta$ is comprised between 0 and 15.

6. A method in accordance with any one of the preceding claims, wherein the limiting wear index ($i_{lim}$) is experimentally obtained.

7. A system for measuring the wear of a disk of composite ceramic material of a disk brake comprising:

-a sensor (25) for detecting the temperature of the disk,

-means (26) for sampling the temperature detected by the sensor at a predetermined frequency (f),

-processing means (28) capable of calculating a wear increment ($\Delta i$) for every sampled temperature and summing the calculated wear increments,

-means (29) for memorizing the sum of the wear increments,

-means (28) for comparing the memorized sum with a predetermined limiting wear index ($i_{lim}$) and

-signalling means (31) for signalling whether the comparison shows that the predetermined limiting wear index ($i_{lim}$) has been exceeded.

8. A system in accordance with Claim 7, wherein the sensor (25) comprises a thermocouple mounted inside a support (34) made of material that is a good

conductor of heat fixed to a brake pad (35) of the disk brake.

9. A system in accordance with Claim 8, wherein the support (34) of the thermocouple has a terminal appendix of low thermal inertia of which the end just projects beyond the surface of the brake pad (35) that comes into contact with the disk.

10. A system in accordance with Claim 9, wherein the thermocouple is housed in a blind hole of the support (34) adjacent to the internal end of the terminal appendix.

11. A system in accordance with any one of Claims 8 to 10, wherein at least one lead of the thermocouple is inserted in a sheath fixed to the supporting plate of the brake pad (35) that forms a projecting element (36) facing the disk of the disk brake, said projecting element (36) being in a position such that the sheath and the lead may be consumed by friction with the disk when the brake pad (35) has become thinned down to a predetermined limiting thickness.